

November 1998

YEAR 2000  
COMPUTING CRISIS

Readiness of State  
Automated Systems to  
Support Federal  
Welfare Programs



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**Accounting and Information  
Management Division**

B-280131

November 6, 1998

Congressional Requesters

The federal government has a huge vested interest in automated state and local systems that support welfare programs. Many of these systems must be renovated to make the transition to the year 2000. Unless renovated, many systems will mistake data referring to 2000 as meaning 1900. Such corrupted data—used by a locality or provided by it to its federal counterpart (or vice versa)—can seriously hinder an agency’s ability to provide essential services to the public.

This report responds to your request that we assess the Year 2000 status of the state and local automated systems used in federal welfare programs. Specifically, our objectives were to (1) determine the reported status of systems used in Medicaid; Temporary Assistance for Needy Families (TANF); Women, Infants, and Children (WIC); food stamps (FS); child support enforcement (CSE); child care (CC); and child welfare programs (CW), and the potential consequences of not modifying these systems in time for the Year 2000 change, (2) identify Year 2000 guidance provided by federal agencies to the states, and (3) identify any Year 2000 oversight and monitoring activities that the federal agencies have performed. We briefed your offices on October 8, 1998, on the results of our assessment. Materials presented during that briefing are included in appendixes I through IX.

To address our objectives, we developed a questionnaire which was sent to the 50 states, the District of Columbia, and three territories (Guam, Puerto Rico, and the Virgin Islands), and received responses from all but South Dakota. We conducted individual pretesting of our questionnaire in Georgia, Maryland, and Pennsylvania to ensure clarity before sending the questionnaires to all 54 entities. We used the pretest results to finalize our questionnaire. We mailed the questionnaire to each entity’s Year 2000 coordinator. We reviewed the completed questionnaires and contacted respondents by telephone to obtain additional information where data were not provided or the answers were not clear.

We did not visit the state computer sites or evaluate the accuracy of the state reports. The information from states is self reported and may therefore vary in accuracy. All questionnaire data that were entered into our database and reports from the resulting analyses were individually verified by an independent analyst to ensure the data were entered

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properly. We also met with federal oversight officials from the Department of Health and Human Service's (HHS) Health Care Financing Administration (HCFA) and Administration for Children and Families and from the Department of Agriculture's (USDA) Food and Nutrition Service.

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## Background

The Year 2000 problem is rooted in the way dates are recorded and computed in automated information systems. For the past several decades, systems have typically used two digits to represent the year, such as "98" representing 1998, in order to conserve electronic data storage and reduce operating costs. With this two-digit format, however, the year 2000 is indistinguishable from 1900, or 2001 from 1901.

The Office of Management and Budget (OMB) identified five phases agencies should complete in conducting their Year 2000 work and established target completion dates for each phase. After awareness of the need to make systems Year 2000 compliant, they must assess (June 1997) systems, including inventorying, analyzing, and prioritizing them. Agencies must then renovate (September 1998) their systems by converting or replacing them, validate (January 1999) through testing and verification that the renovation work was appropriate, and implement (March 1999) the converted or replaced systems. These phases are discussed in detail in our publications Year 2000 Computing Crisis: An Assessment Guide (GAO/AIMD-10.1.14, September 1997) and Year 2000 Computing Crisis: A Testing Guide (GAO/AIMD-10.1.21, Exposure Draft, June 1998).

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## Results in Brief

The states<sup>1</sup> reported that they are using 421 automated systems to manage the seven federal welfare programs in our survey. (See appendix I for further details.) Several states reported that they use more than one system to support a program. While many states do not require Year 2000 costs to be accounted for separately, states provided estimates totaling about \$545 million (federal and state funding) during fiscal years 1997 through 2001 for completing Year 2000 conversion of their welfare information systems.

Failure to complete Year 2000 conversion could result in billions of dollars in benefits payments not being delivered. Potential problems states cited were that (1) new recipients could not be added to the recipient file, (2) eligibility for new applicants could not be determined, (3) recipients

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<sup>1</sup>Meaning the 49 states, the District of Columbia, and the three territories that responded to our survey.

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could be denied benefits, (4) payments could be underpaid or overpaid, and (5) payments could be delayed.

The reported status of state welfare systems is highlighted below and the details are in appendixes II to IX.

- Overall, about one-third of the systems are reported to be compliant. The compliance rate ranged from only 16 percent of the Medicaid systems to about half of the CC and CW systems. (See appendix II for details.)
- States reported that they had completed the assessment phase for about 80 percent of the welfare systems supporting these seven programs. (See appendix III for details.)
- According to OMB guidelines,<sup>2</sup> systems renovation work should have been completed by September 1998. By comparison, as of the July/August 1998 response dates, states reported having completed renovation on only about one-third of the systems. At that time, only Arkansas, Idaho, and Utah reported that they were over 75 percent complete in renovating all systems supporting the seven programs. Of those states that had not completed this phase, many systems (25 percent) were no more than one quarter complete. Eighteen states reported that they had completed renovating one quarter or fewer of their Medicaid claims processing systems. These 18 states had Medicaid expenditures of about \$40 billion, one quarter of total Medicaid expenditures, for about 9.5 million recipients in fiscal year 1997. (See appendix IV for details.)
- About one quarter of the systems were reported as having completed the validation and implementation phases. Thorough testing is required to ensure that Year 2000 modifications function as intended and do not introduce new problems. Despite this need, states said that they had not developed test plans for about 27 percent of the systems. (See appendix V for details.)

In addition to Year 2000 systems conversions, states must continue to perform routine systems development and maintenance activities as well as implement other systems changes required to support their welfare programs. Eighty percent of the states noted that these systems activities have been delayed because of the Year 2000 compliance efforts. (See appendix VI for the types of system activities reported postponed due to Year 2000 effort.) Faced with these competing priorities, states reported that they are struggling to manage these workloads, including important

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<sup>2</sup>On January 20, 1998, OMB issued a memorandum to the heads of executive departments and agencies entitled "Progress Reports on Fixing Year 2000 Difficulties." This memorandum revised the target dates for Year 2000 work and established September 1998 as the date for completion of renovation of systems.

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initiatives such as tracking and reporting requirements of federal welfare reform, new HCFA programmatic requirements, and new child support requirements.

The states cited two federal agencies as most frequently providing guidance. USDA and HCFA were cited, respectively, by about 75 and 64 percent of the states for providing federal guidance. Other agencies, mentioned less than half of the time, included OMB, the Administration for Children and Families, and the Social Security Administration. (See appendix VII for details.) The top category of desired additional support mentioned by the states was funding (mentioned by 77 percent). Other categories, such as continuity planning and guidance in testing, were mentioned by about a quarter of the states. (See appendix VIII.)

States also cited USDA and HCFA as providing the most oversight, about 87 and 62 percent respectively. Less than half of the states noted that the Administration for Children and Families, Social Security Administration, and OMB provided oversight activities. These activities included site visits, focus groups, and required status reports. (See appendix IX.)

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We sent copies of our briefing materials, which were used in preparing this report, to the federal oversight officials with whom we met at HCFA, the Administration for Children and Families, and USDA's Food and Nutrition Service. Copies were also sent to key officials at HHS, OMB, USDA, and the National Association of State Information Resource Executives, and we responded to their questions on these materials. Our work was performed from May through September 1998, in accordance with generally accepted government auditing standards.

As agreed with your offices, we are providing copies of this report to the Secretary of Health and Human Services; the Secretary of Agriculture; the Administrators, Health Care Financing Administration, Administration for Children and Families, and USDA Food and Nutrition Service; the Director, Office of Management and Budget; appropriate congressional committees; and other interested parties. Copies will also be made available to others upon request.

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Please contact me or Christie Motley, Assistant Director, at (202) 512-6408 if you have any questions regarding this report. We can also be reached by e-mail at *willemsenj.aimd@gao.gov* and *motleyc.aimd@gao.gov*, respectively. Major contributors to this report are listed in appendix X.

A handwritten signature in black ink that reads "Joel Willemsen". The signature is written in a cursive style with a large, looping initial "J".

Joel C. Willemsen  
Director, Civil Agencies Information Systems

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List of Congressional Requesters

The Honorable William V. Roth, Jr.  
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Committee on Finance  
United States Senate

The Honorable John D. Rockefeller, IV  
United States Senate

The Honorable E. Clay Shaw, Jr.  
Chairman

The Honorable Sander M. Levin  
Ranking Minority Member  
Subcommittee on Human Resources  
Committee on Ways and Means  
House of Representatives

The Honorable Nancy L. Johnson  
Chairwoman  
Subcommittee on Oversight  
Committee on Ways and Means  
House of Representatives

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# Contents

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Letter	1
Appendix I Total Number of Reported State Welfare Systems	10
Appendix II Reported Status of State Welfare Systems as of July/August 1998	11
Appendix III Reported Status of the Assessment Phase	12
Appendix IV Reported Status of the Renovation Phase	13
Appendix V Reported Status of Validation and Implementation	21
Appendix VI Types of System Activities Postponed Due to Year 2000 Effort	24

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Appendix VII Federal Guidance	25
Appendix VIII Additional Support Needed From Federal Government	27
Appendix IX Federal Oversight	28
Appendix X Major Contributors to This Report	30

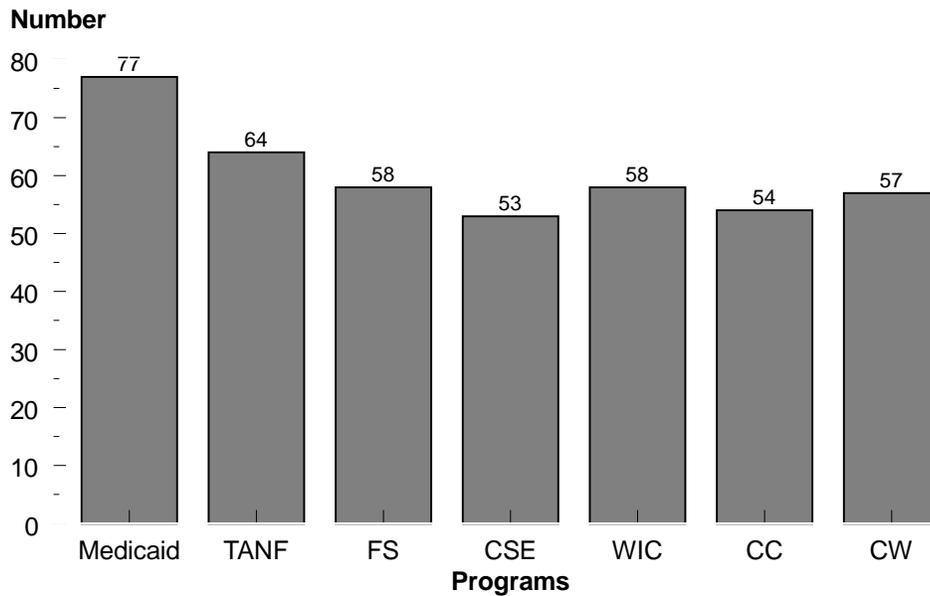
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**Abbreviations**

CC	child care
CSE	child support enforcement
CW	child welfare programs
FNS	Food and Nutrition Service
FS	food stamps
HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
OMB	Office of Management and Budget
TANF	Temporary Assistance for Needy Families
USDA	Department of Agriculture
WIC	Women, Infants, and Children

# Total Number of Reported State Welfare Systems

## GAO Total Number of Reported State Welfare Systems

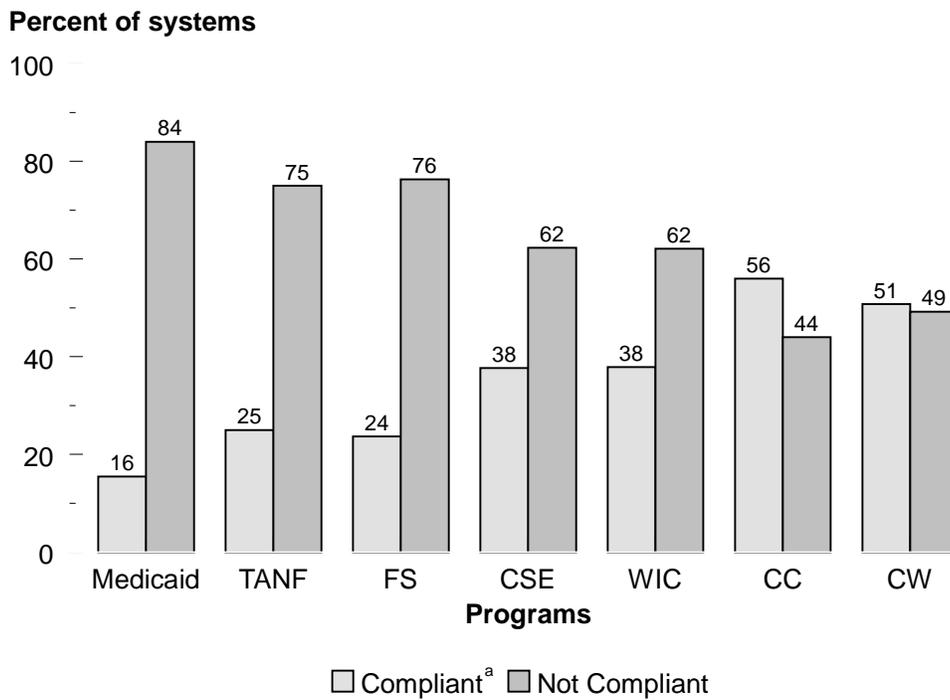


■ Number of Systems<sup>a</sup>

<sup>a</sup> The states operate 421 automated systems to support the seven welfare programs. Several states reported using more than one system to support a program.

# Reported Status of State Welfare Systems as of July/August 1998

## GAO Reported Status of State Welfare Systems as of July/August 1998

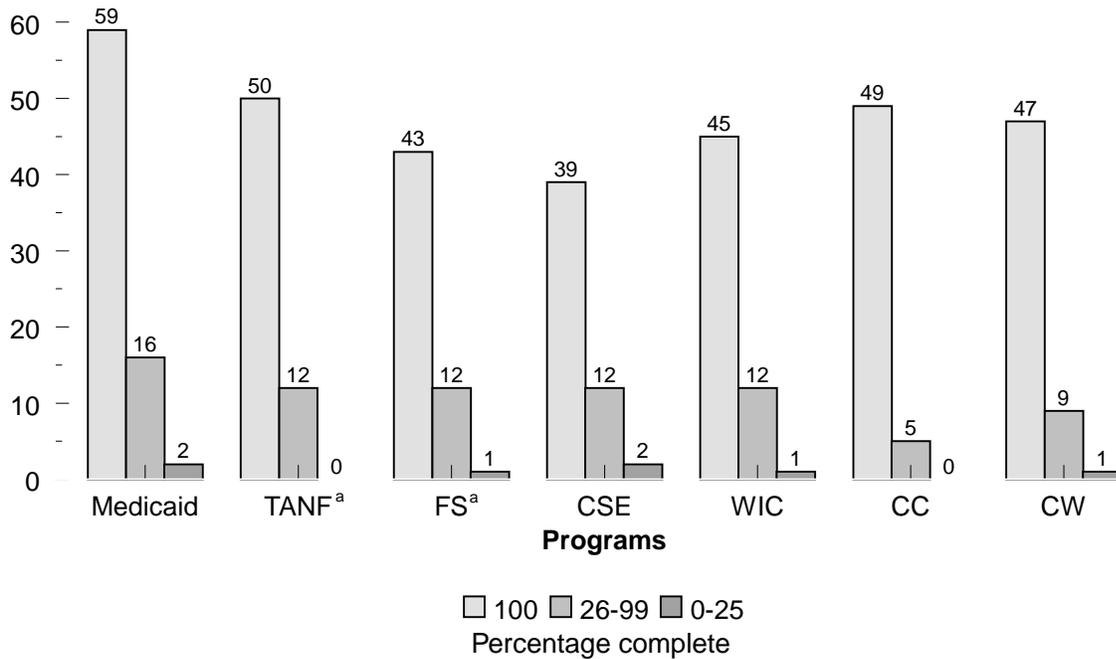


<sup>a</sup>In some cases, systems reported as compliant have not been validated.

# Reported Status of the Assessment Phase

## GAO Assessment Phase - Reported Status of Completion

Number of Systems

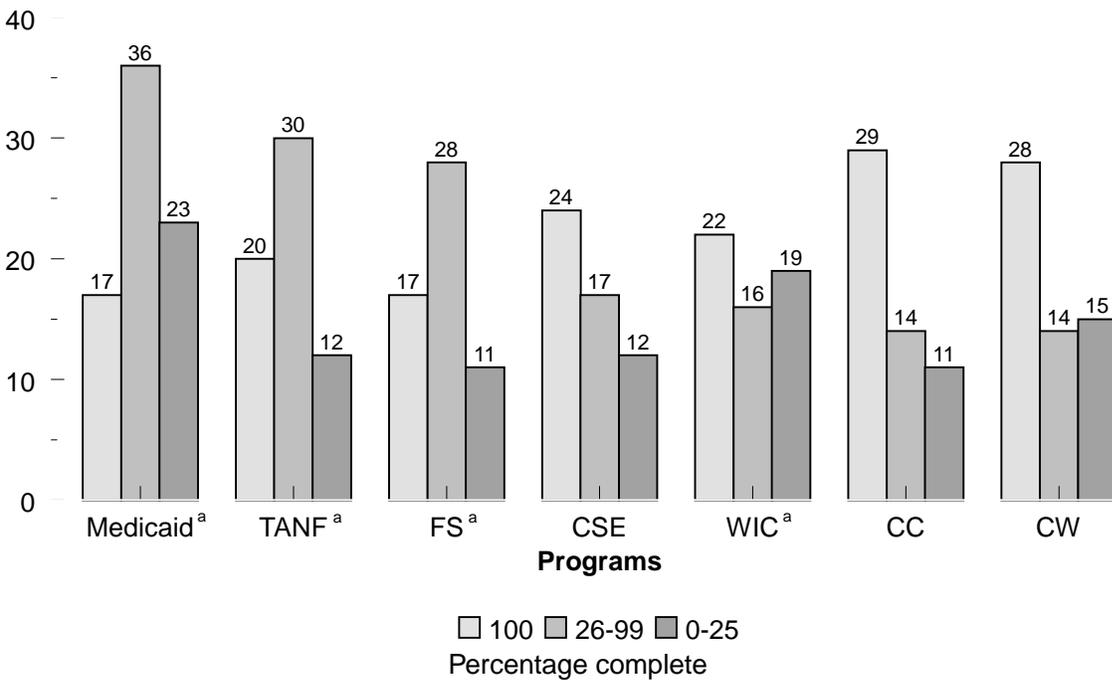


<sup>a</sup>Not all states reported percentage completed.

# Reported Status of the Renovation Phase

## GAO Renovation Phase - Reported Status of Completion

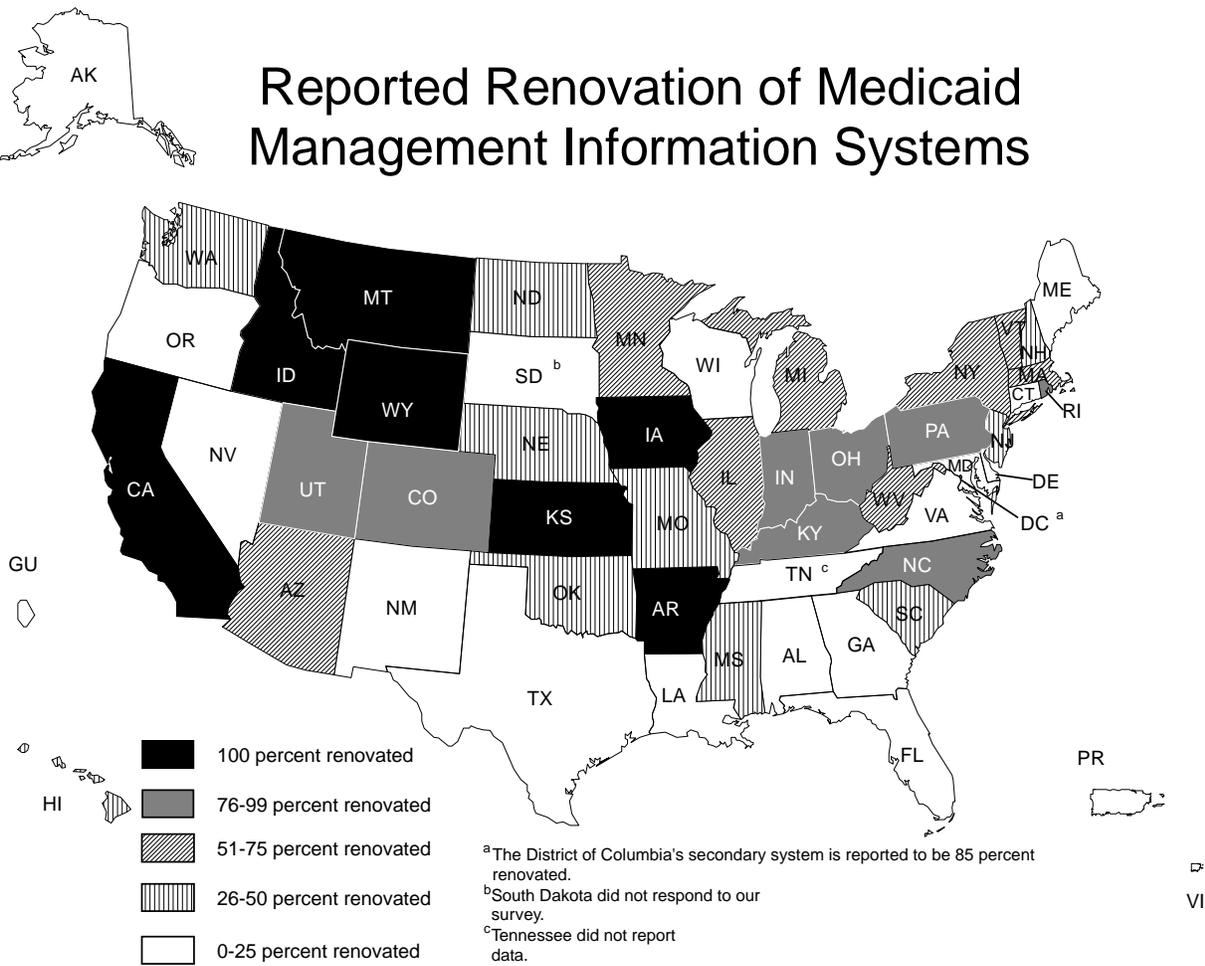
Number of Systems



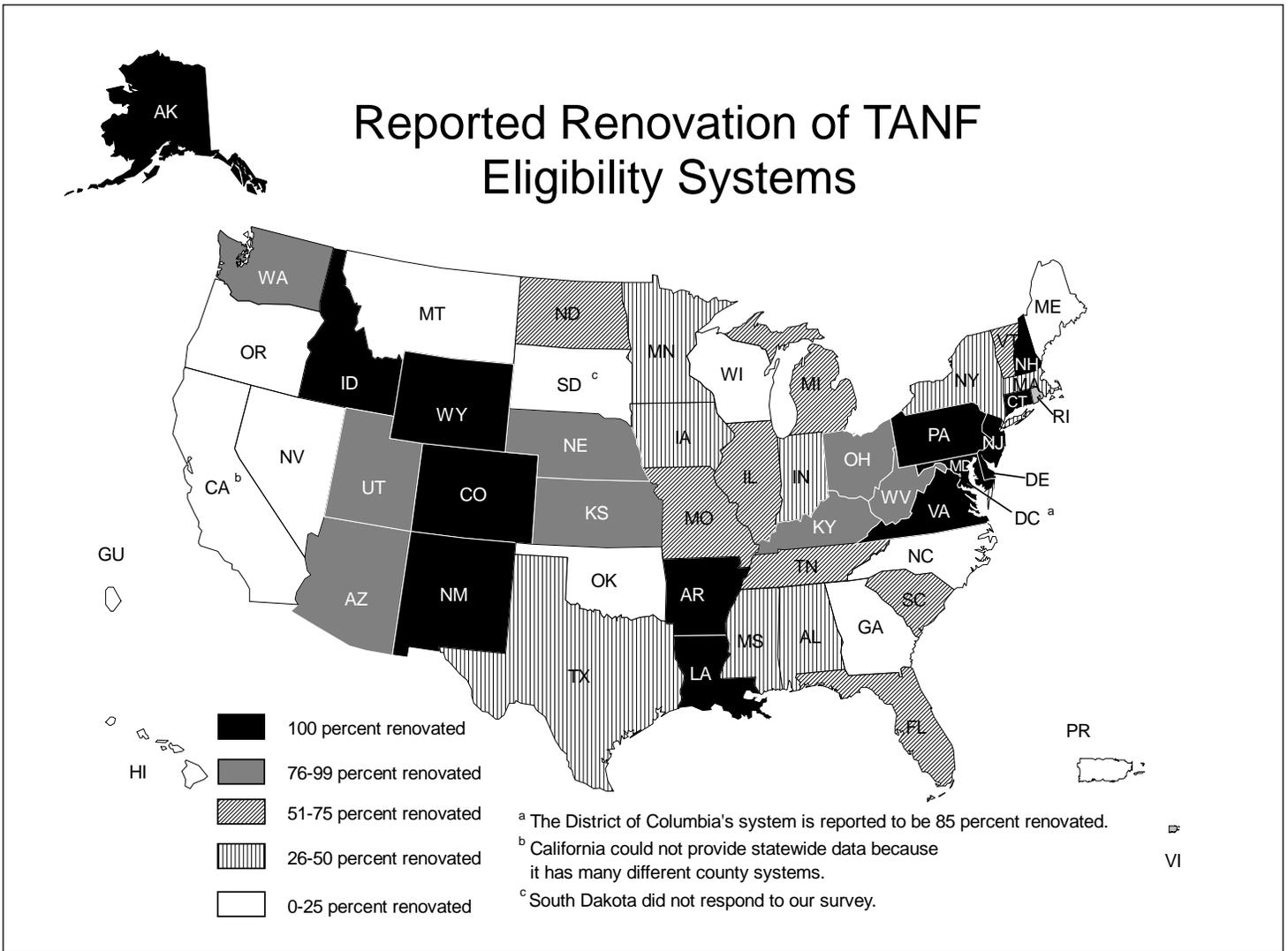
<sup>a</sup> Not all states reported percentage completed.

**Appendix IV  
Reported Status of the Renovation Phase**

# Reported Renovation of Medicaid Management Information Systems



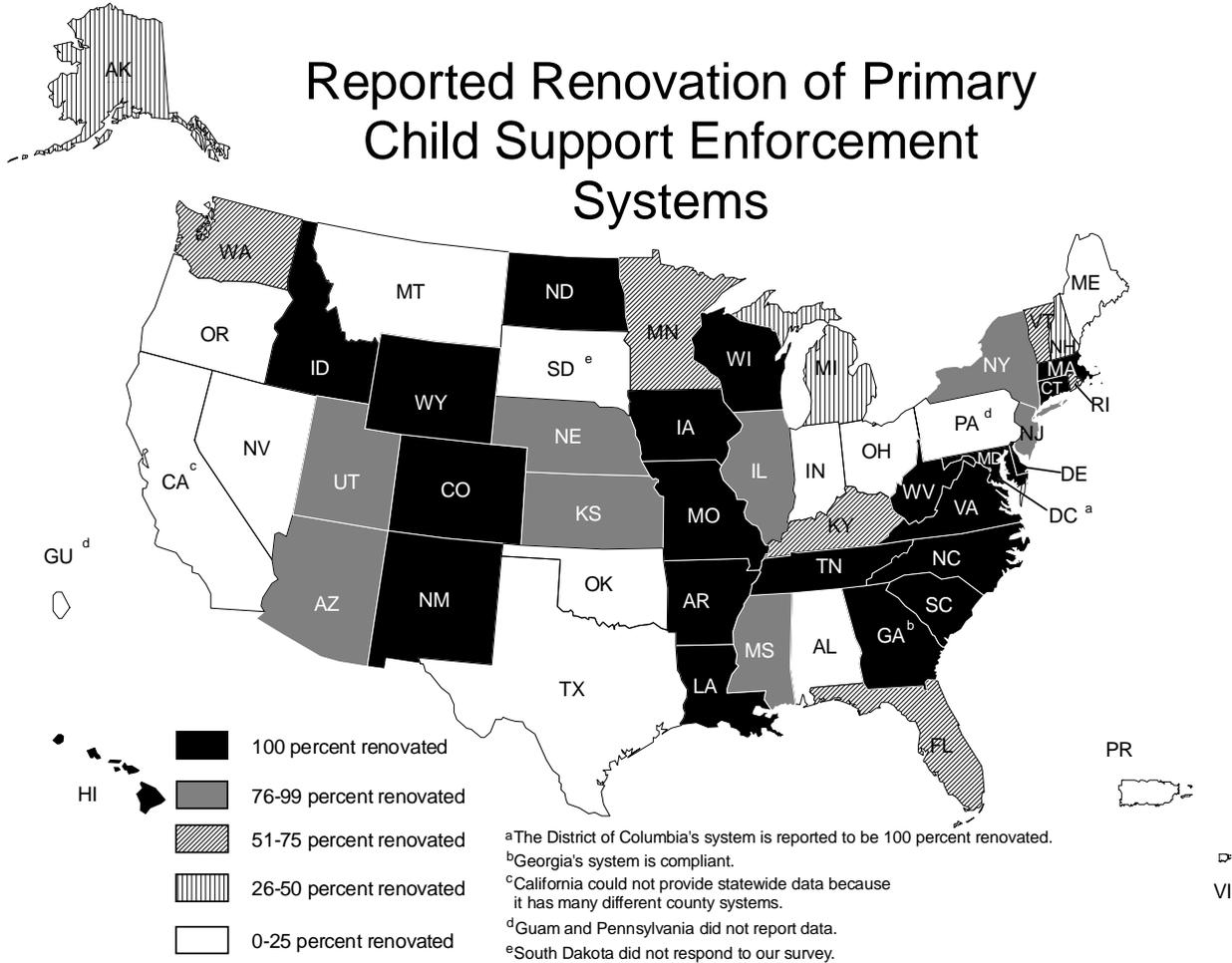
**Appendix IV  
Reported Status of the Renovation Phase**





**Appendix IV  
Reported Status of the Renovation Phase**

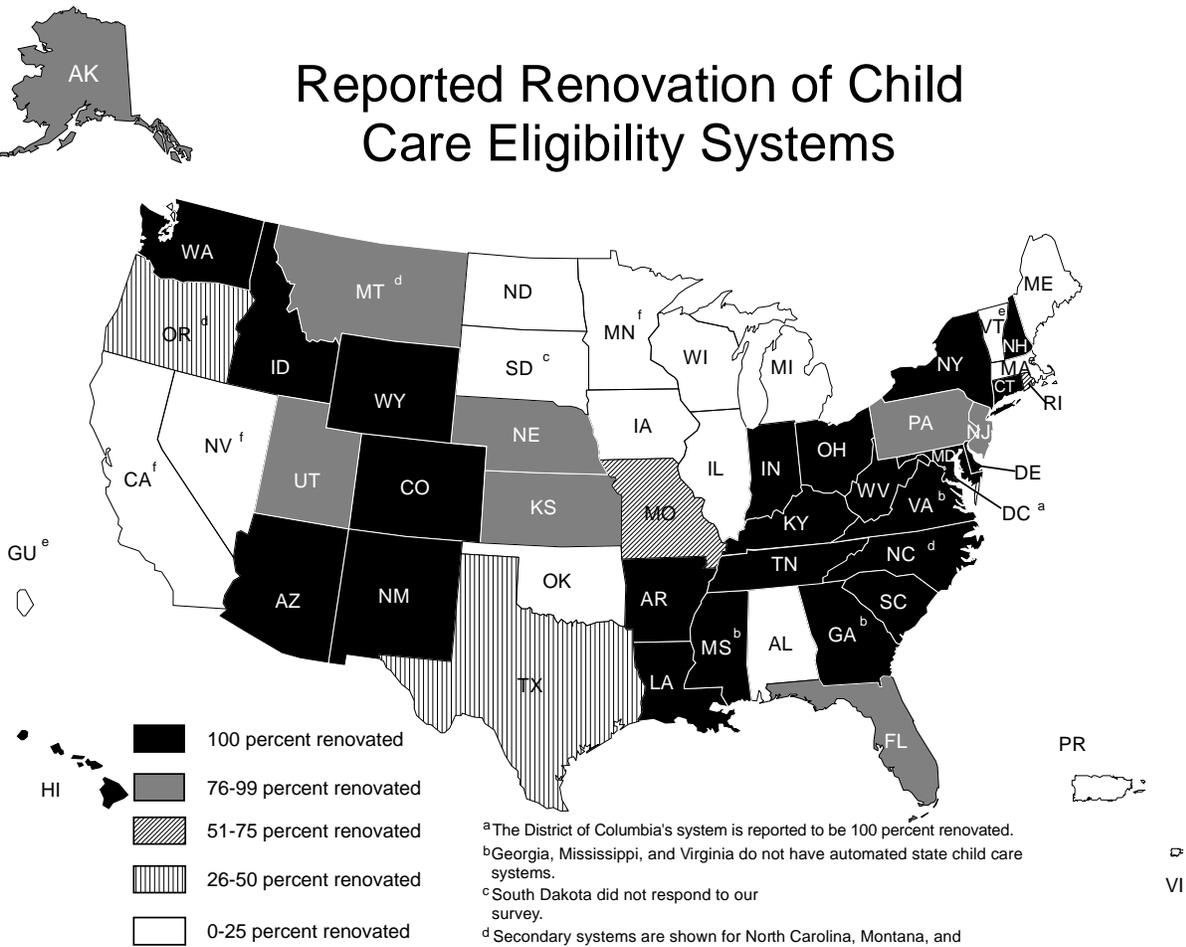
## Reported Renovation of Primary Child Support Enforcement Systems



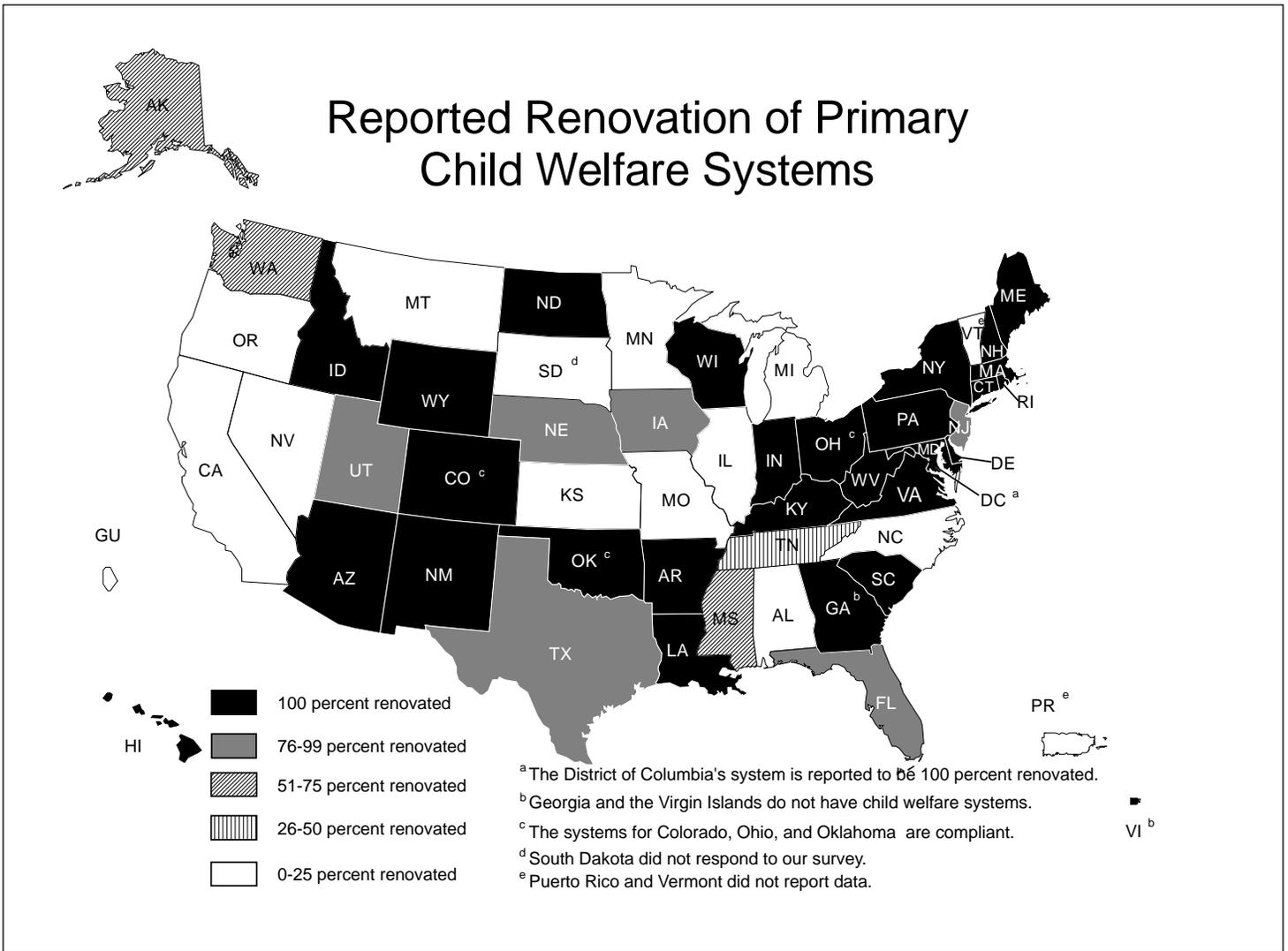


**Appendix IV  
Reported Status of the Renovation Phase**

## Reported Renovation of Child Care Eligibility Systems



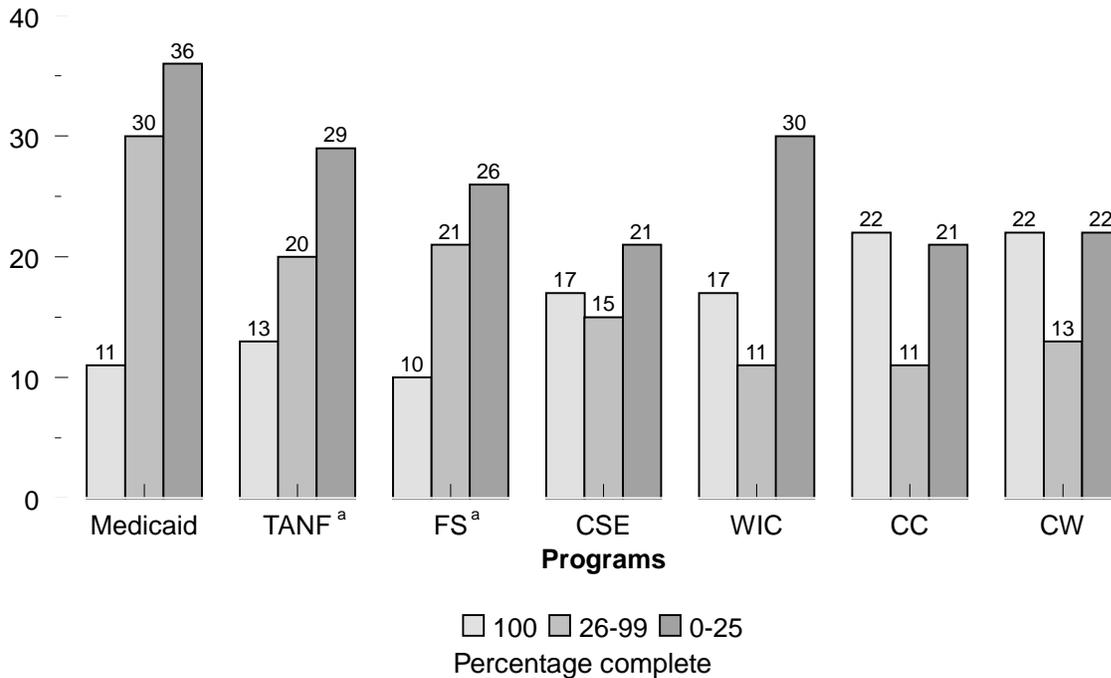
**Appendix IV  
Reported Status of the Renovation Phase**



# Reported Status of Validation and Implementation

## GAO Validation Phase - Reported Status of Completion

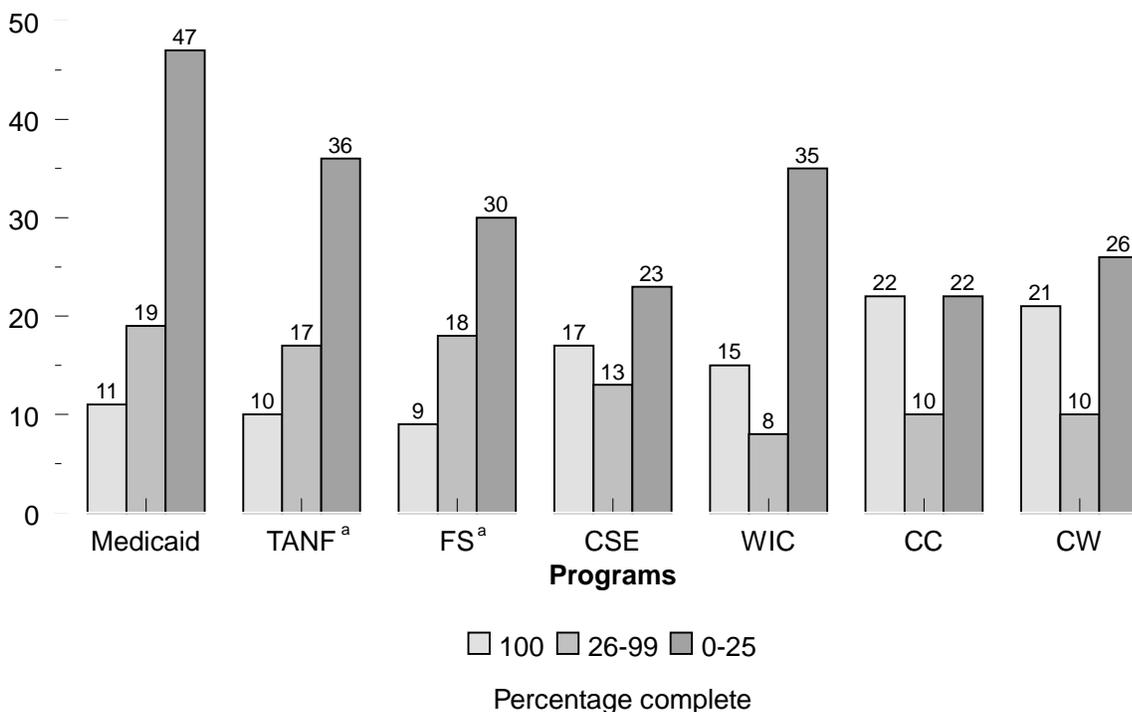
Number of Systems



<sup>a</sup> Not all states reported percentage completed.

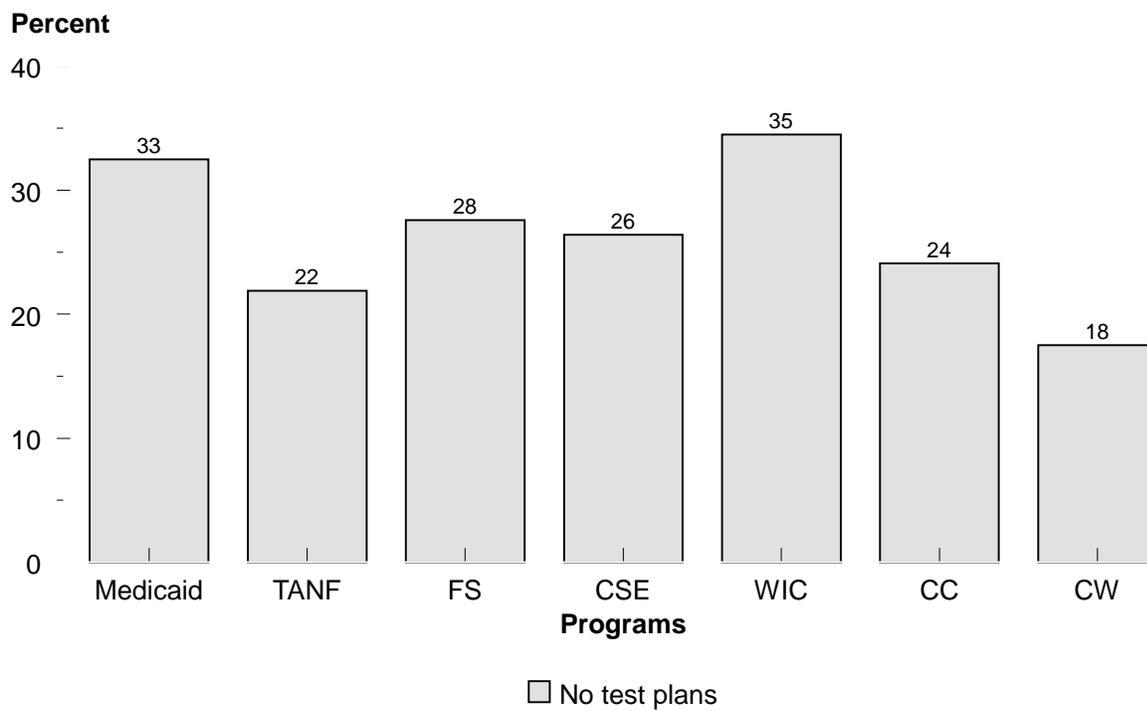
# GAO Implementation Phase - Reported Status of Completion

Number of Systems



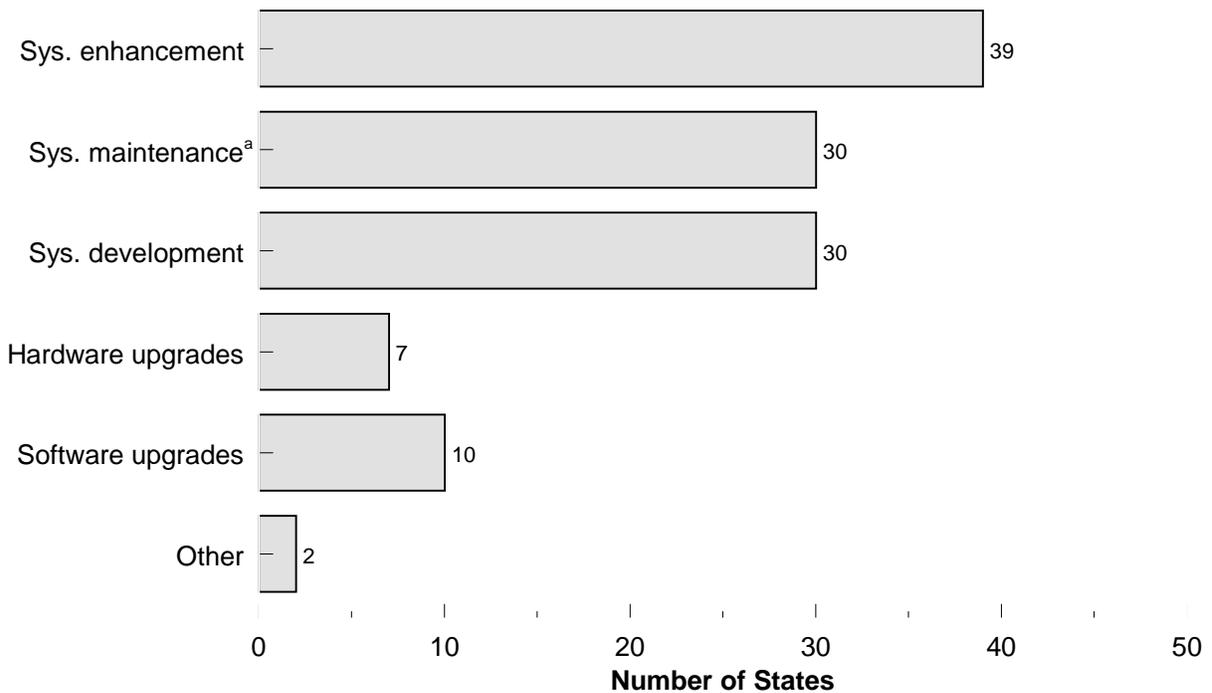
<sup>a</sup> Not all states reported percentage completed.

## GAO Percentage of Systems With No Test Plans Developed



# Types of System Activities Postponed Due to Year 2000 Effort

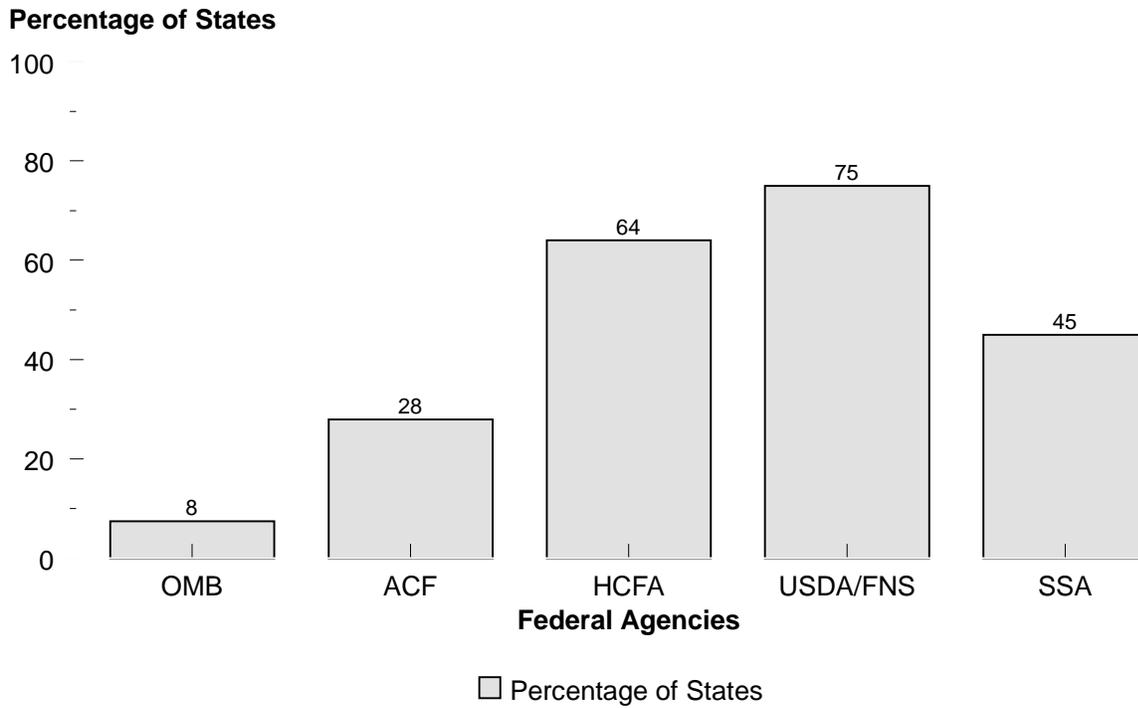
## GAO Types of System Activities Postponed Due to Year 2000 Effort



<sup>a</sup> Systems maintenance excluding year 2000 activities.

# Federal Guidance

## GAO Percentage of States Reporting Year 2000 Guidance from Selected Federal Agencies



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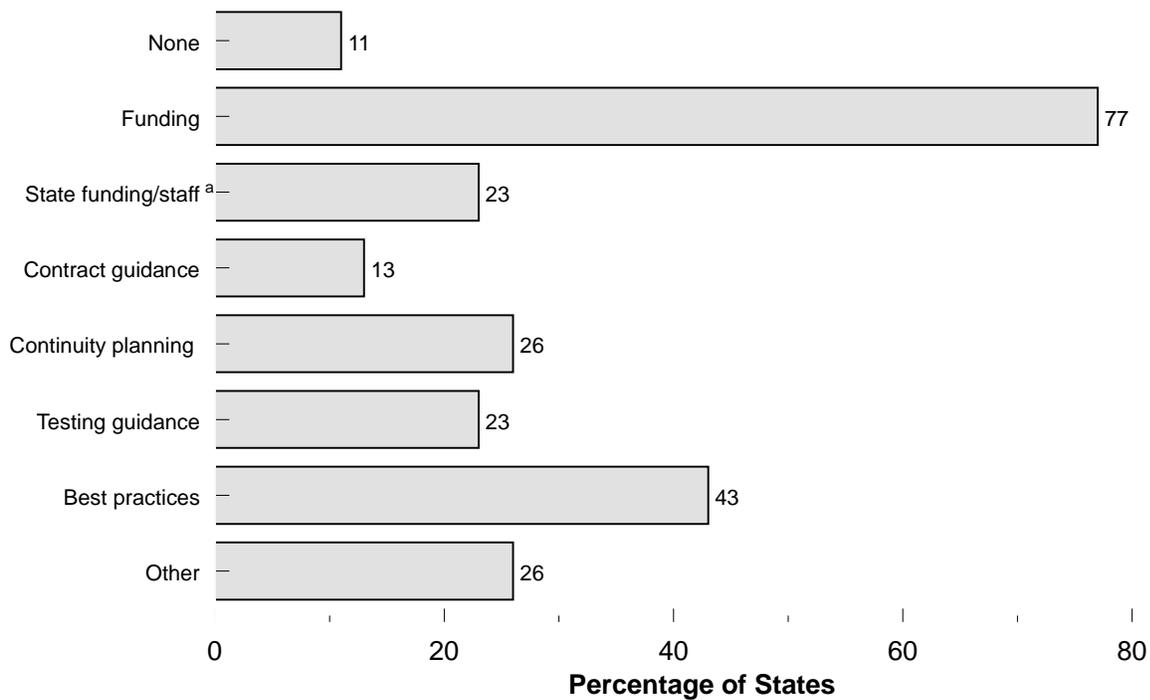
GAO Types of Federal Guidance Received  
by States

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- Date formatting standards for systems
  - Planning year 2000 work
  - Reporting year 2000 status
  - Contingency planning
  - Identifying data exchange issues
-

# Additional Support Needed From Federal Government

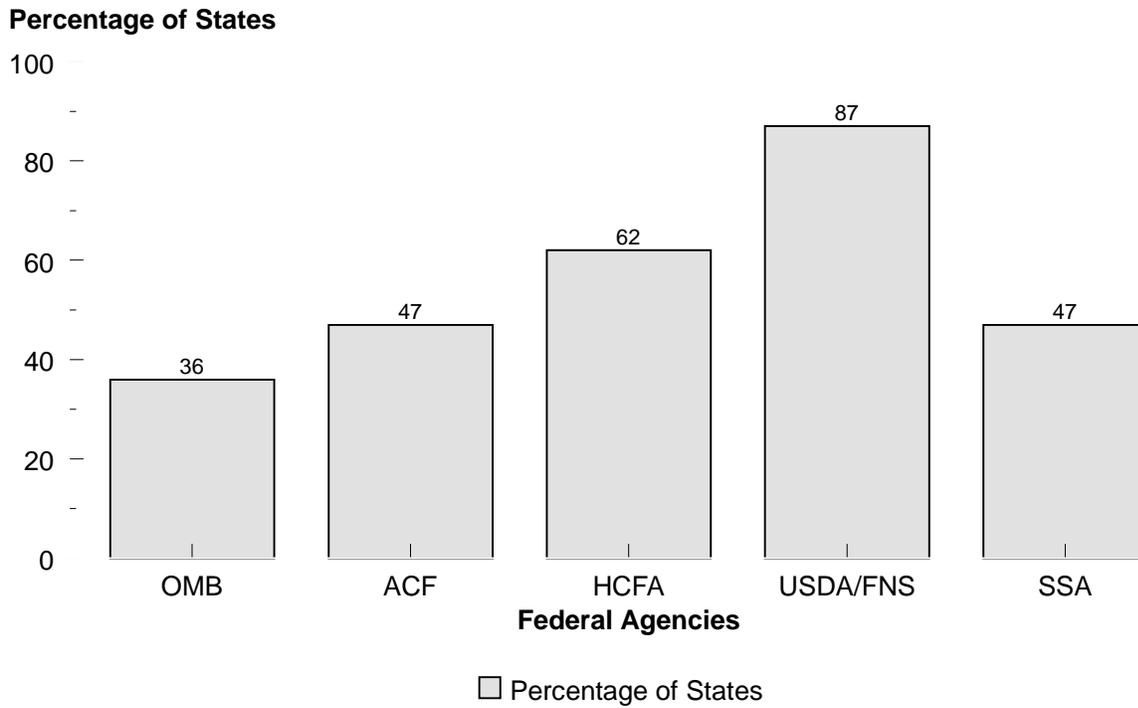
## GAO Additional Support Needed from Federal Government



<sup>a</sup> Assistance in obtaining state legislature support for funding and staffing.

# Federal Oversight

## GAO Percentage of States Reporting Year 2000 Oversight from Selected Federal Agencies



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## GAO Types of Federal Oversight Provided

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- Required status reports
  - Telephone calls
  - On site visits
  - Focus groups
  - Required to include year 2000 activity in Advance Planning Document
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# Major Contributors to This Report

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